5.0 SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

5.1 SOCIOECONOMIC EFFECT

This section describes the existing population and employment activity near the Chevron El Segundo Marine Terminal Lease Renewal Project (Project) site and the socioeconomic regulatory setting associated with the Project. This section also identifies the applicable significance thresholds for socioeconomic impacts, assesses potential impacts of the Project and alternatives, and recommends measures to mitigate significant adverse impacts.

5.1.1 Environmental Setting

The socioeconomic study area for the proposed Project is Zip Code Tabulation Area (ZCTA) 90245 (see Figure 5-1). This subsection addresses existing population, employment, economic activity, and income conditions in the Project and regional areas.

Population

Table 5-1, Population Data, summarizes population characteristics in Los Angeles County and the Project area. The population of Los Angeles County has increased from 8,863,164 persons in 1990 to 9,519,338 persons in 2000, and the 2005 population is estimated at 10,258,304, an increase of 7.7 percent since 2000. In its 2004 Regional Transportation Forecast, the Southern California Association of Governments (SCAG) predicted that the population of Los Angeles County would reach 11.87 million by 2025, which would represent an increase of 16 percent over a 20 year period. In 1990, the population of the Project area, i.e., the socioeconomic study area, was 15,225 persons, which increased to 16,033 persons in 2000. This is a five percent increase over a 10-year period. Because the census is completed once every 10 years, more current data on population within the Project area are not yet available. According to SCAG, if the current population of the study area were to grow at the same rate as the County population (24 percent), the ZCTA 90245 population would increase to 19,880 by the year 2025, an increase of 3,848 persons.

Table 5-1
Population Data

Location	1990	2000	2025
Los Angeles County	8,863,164	9,519,338	11,870,000
Project Area	15,225	16,033	19,880

Note: These data are estimates of the actual population.
Source: USCB 2000, SCAG 2009

Employment, Income, and Economic Activity

Total employment (civilian and Armed Forces) in Los Angeles County was 4,259,700 jobs in 1990 and 4,423,300 jobs in January 2009 (CEDD 2009). This represents an increase of 3.8 percent over a 19-year period. SCAG predicts that employment will increase to 5.5 million jobs by 2025. This represents an average annual increase of nearly 50,000 jobs per year over the 20-year period, a total increase of 22 percent. In 2000, total employment in the socioeconomic study area was 9,241 jobs. Employment in the area is classified by type and is shown in Table 5-2, Employment Type for ZCTA 90245. Of the 1,537 manufacturing jobs identified in Table 5-2, 94 percent, or 1,450 jobs, are associated with the proposed Project. Assuming that employment would rise at the same rate in the study area as in the region as a whole, employment would rise to 12,845 jobs by 2025 in the study area, an increase of 39 percent.

Table 5-2
Employment Type for Zip Code Tabulation Area 90245

Sector	Total 2000 Employees
Agriculture	13
Mining	18
Construction	382
Manufacturing	1,537
Transportation and Utilities	1,081
Wholesale Trade	212
Retail Trade	775
Finance	648
Services	2,331
Government	1703
Total	9,241

Source: USCB 2000

Income characteristics for the County and the Project area are presented in Table 5-3, Income Characteristics. These data are from the 2000 census and reflect income received in 1999.

Figure 5-1
Zip Code Tabulation Area 90245

Source: USCB 2000

Table 5-3
Income Characteristics

Category	County	Census Tract 6200
Median Family Income[a]	$46,452	$74,007
Median Household Income[b]	$42,189	$61,341
Per Capita Income	$20,683	$33,996

Notes: a. Family income is defined by the United States Census as the total earnings of a family and includes divorced families. b. Household Income is defined by the United States Census as the total earnings of a household as designated on tax filings.
Source: USCB 2000

Offshore much of the Santa Monica Bay is essentially closed to commercial fishing, including both protected marine areas and other nearshore areas (MLPA 2008). In 2002, the California Fish and Game Commission adopted a restricted access program for the commercial nearshore fishery. This program reduced the number of permittees by 65 percent and their potential catch by 35 percent. These qualifying criteria reduced the number of permits to 57 Nearshore Fisheries Permits (NFP) and 39 trap endorsements in the South Coast Region. Permittees are allowed only one NFP to fish in a single region. The fishery is limited to line gear unless the permit holder also has a trap gear endorsement. Criteria for initial permit issuance (transferable permits), for non-transferable permits for 20-year commercial fishermen, and for gear endorsements were established. A two-for-one permit transfer system was adopted that requires new entrants to purchase two permits from the same region, permanently retire one permit and use the other to fish. Additionally, a Nearshore Bycatch Permit was adopted for trawl and gill net fishermen who have had a Nearshore Fishery Permit in previous years.

Local Economic Activity

The Chevron Refinery is a key contributor to the regional oil Refinery economy. Total Los Angeles-area refining capacity is about 1,074,200 barrels per day or 391 million barrels per year. The Los Angeles region accounts for nearly one-half of California's refineries' capacity. Table 5-4, Summary of Los Angeles Area Crude Oil Refining Capacity, illustrates the current daily throughput capacity for individual Los Angeles area refineries. The Chevron Refinery processes about 26 percent of Refinery capacity in the region. The Chevron Refinery in El Segundo and the BP Refinery in Carson are the largest refineries in the Los Angeles area.

Table 5-4
Summary of Los Angeles Area Crude Oil Refining Capacity

Owner, Location	Barrels Per Day (bpd)
Chevron USA, El Segundo[a]	260,000
BP West Coast Products LLC, Carson	260,000
Valero (Ultramar Inc.) Wilmington Refinery, Los Angeles	87,000
ExxonMobil Refining and Supply Co., Torrance	149,500
Tesoro, Wilmington	100,000
Edgington Oil Company, Long Beach	14,000
ConocoPhillips, Wilmington	139,000
Lunday Thagard, South Gate	8,500
Paramount Petroleum Corp., Paramount	50,000
Valero Refining Co., Wilmington	6,200
Total	**1,074,200**

Note: a. Project site.
Source: L.A. Almanac 2006

Crude Oil, Product Shipment, and Marine Terminal Capacities

In 2005, total receipts to California refineries of roughly 729 million barrels (bbl) came from in-state oil production (40 percent), Alaska (20 percent), and foreign sources (40 percent). Approximately one-half of this amount was received by Los Angeles-area refineries. Therefore, in 2005, crude oil receipts at the Los Angeles-area refineries were approximately 328 million bbl (CEC 2007). Table 5-5, Total Capacity of Los Angeles Basin Marine Terminals, summarizes the approximate capacities of the Los Angeles area marine terminals; Table 5-6, Annual Throughput of Crude Oil and Petroleum Products Into and Out of the Los Angeles Basin, summarizes the overall volumes of crude oil and petroleum products transported into and out of the area.

Table 5-5
Total Capacity of Los Angeles Basin Marine Terminals

General Terminal Locations	Barrels[a]
Port of Los Angeles	6,000,000[b]
Port of Long Beach	4,640,000
Chevron Marine Terminal	700,000
Total	**11,340,000**

Notes: Chevron data based on 1/2 of maximum practicable throughput.
a. These estimates are approximate barrels that are limited by factors such as feasible berth occupancy rates, pumping limitations, and available tank storage.
b. Includes all liquid bulk.
Source: POLA 2009, CEC 2007

Table 5-6
Annual Throughput of Crude Oil and Petroleum Products Into and Out of the Los Angeles Basin

Terminal	Crude (bbl)	Petroleum Products (bbl)
Port of Los Angeles (2006)	1,861,000	108,942,000
Port of Long Beach (2006)	151,632,000	9,998,000
Chevron Marine Terminal	69,300,000	16,302,650
Totals	**222,793,000**	**135,242,650**

Notes : 1 barrel = 42 gallons = 311 pounds (crude) = 0.155 tons (crude). 1 ton = 2,000 pounds.
1 gallon of crude = 7.4 pounds (average).
Source: POLA 2009, CEC 2007, Chevron 2005

El Segundo Marine Terminal Operations

The Project site receives approximately 80,450,000 bbl annually (220,400 bpd), or 30 percent of the crude oil shipped into the Los Angeles area. Approximately 82 percent of the crude oil for the Project site is received via the Marine Terminal; the remaining 18 percent is delivered by pipelines, trucks, and rail. Based on 2008 shipments, of that 18 percent, approximately 16.92 percent is delivered by pipeline, 0.74 percent is delivered by rail, and 0.33 percent is delivered by truck. Five onshore pipelines transport crude oil and crude oil products to and from the Marine Terminal, including the Inglewood-El Segundo Refinery Pipeline, the Shell/Union-El Segundo Refinery Pipeline, Notham-El Segundo Refinery Pipeline, Four Corners Pipeline, and the Wilmington/Torrance-El Segundo Refinery Pipeline.

The vast majority of the Refinery's products that are exported to users through onshore pipelines are sent via pipelines owned by Chevron Products Company (Chevron) and a common carrier, Kinder Morgan, to destinations in Los Angeles, Ventura, San Diego,

Southern Nevada, and Arizona. In 2008, the Refinery exported an average of 324,048 barrels of products per day. Approximately 83.38 percent was shipped by pipeline, 7.56 percent was shipped via marine vessels (including barges), 7.39 percent was shipped by truck, and 1.67 percent was shipped by rail.

The long-term Refinery requirements and the shipment of crude oil and products depend on a wide variety of worldwide, national, and regional factors, including the following:

- The general economy, which is directly related to consumption of fossil fuels;
- Availability, characteristics, and price of various crude sources;
- Environmental concerns relative to the type of crude to be refined and the fact that reformulation of fuels using oxidizers like ethanol may give small refiners a competitive disadvantage; and
- Market pressure, which may cause individual marketers to change marketing areas or locations for refineries because of market pressure.

Because of these variables and many others, it is not possible to predict with certainty future oil demands within the Los Angeles area.

5.1.2 Regulatory Setting

Federal Regulatory Setting

There are no federal policies relevant to socioeconomics.

State Regulatory Setting

Guidelines for implementing the California Environmental Quality Act (CEQA) are found in Title 14 California Code of Regulations, Chapter 3 Guidelines for Implementation of the California Environmental Quality Act, Article 1, General Sections 15000 to 15007. Section 15360 clarifies that the "environment" includes both natural and man-made conditions. The California State Lands Commission (CSLC) has determined that socioeconomic resources may be affected by the new 30-year lease for continued operation of the Marine Terminal and must be addressed in the assessment of impacts associated with the Project.

Local Regulatory Setting

There are no local policies relevant to socioeconomics.

5.1.3 Significance Criteria

The proposed Project is considered to have a significant impact if Project implementation causes the following changes:

- An increase of more than three percent population growth;
- An increase in infrastructure requirements that cannot be met by existing utility systems;
- An increase in demand in the delivery and utilization of basic public services that cannot be met by the government;
- An increase in land values and housing costs that exceeds the purchasing power of local residents;
- A decrease in government revenue or increase in government expenditure that will cause a net loss;
- Disruption and division of neighborhoods causing social disability;
- Displacement of existing structures and residents that cannot be relocated to comparable areas; or
- Displacement or termination of existing economic activity that cannot be compensated or relocated to comparable areas that possess equal potential for income generation.

5.1.4 Analysis and Conditions

This section addresses the socioeconomic impacts resulting from the continuation of operations at the Marine Terminal. For purposes of the environmental discussion of social and induced socioeconomic effects, both regional and local environments are considered.

Population and Housing

The proposed Project is a continuation of the existing operations of the Marine Terminal. The number of employees that work at the Marine Terminal and Refinery would continue at approximately the current rate. Consequently, there would be no increase in population or demand for housing in the area. The proposed Project would not result in an increase in land values or housing costs that would exceed the purchasing power of local residents. Neither would the proposed Project cause disruption and division of neighborhoods resulting in social disability. Also, no displacement of existing structures or residents would occur. Hence, no population or housing impacts are anticipated as a result of the proposed Project.

Employment, Income, and Economic Activity

The proposed Project would not change employment, income, and economic activity because the Project is a continuation of existing economic activity. Thus, the Project would not change government revenue or expenditures. The Project would not displace or terminate existing economic activity; rather, it would allow existing economic activity to continue. The proposed Project would continue contributing to the economic health of the area by maintaining approximately 1,450 jobs. Hence, there would be no adverse impacts associated with the proposed Project related to employment, income, or economic stability in the area.

Demand for Public Services and Utilities

The proposed Project does not involve expanded or intensified use of additional public services or utilities beyond current conditions. Police and fire emergency services may be required in the event of an oil spill; however that demand would be identical to current demand in the event of an oil spill. Therefore, no adverse impacts associated with public services or utility demand would occur.

5.1.5 Impacts of Alternatives

No Project Alternative

If the Marine Terminal lease were terminated immediately, it is assumed that the Marine Terminal would be decommissioned, the equipment would be removed, and the site would be cleaned for alternative uses. Chevron would import crude oil and export products through other means, including the POLA/POLB terminals, onshore pipelines, unit trains, trucking, or, most likely, a combination of those means of transportation. This could limit the operations of the Refinery and may cause the Refinery to reduce its throughput. The removal of these uses from the Project area would result in an incremental decrease in the need for public services and utilities infrastructure in the Project area. As such, no adverse impact with regard to public services and utilities infrastructure would occur as a result of implementation of this alternative. However, closure of the terminal and reduction of throughput at the Refinery would cause a reduction of jobs and economic activity as detailed in the impact below. In addition, increased use of the port by vessels and the associated increase in spill risk could increase port closures. For example, the *M/V Sammi Superstar* spilled approximately 308 barrels of bunker fuel in the POLB on January 8, 1991, and reportedly caused a shutdown of the Port and a subsequent loss of millions of dollars.

Impact SOC-1: Displacement or Termination of Economic Activity

Displacement or termination of existing economic activity that cannot be compensated or relocated to comparable areas that possess equal potential for income generation.

The closure of the Marine Terminal and throughput reduction at the Refinery would eliminate existing economic activity, causing the loss of a number of jobs or a temporary port closure due to an oil spill could cause loss of economic activity (Potentially Significant, Class I).

Impact Discussion

The shutdown of the Marine Terminal would cause a loss of a number of jobs and contractors, which would account for loss of jobs in the Los Angeles County area and a loss of employment in the local ZCTA. A large percentage of the jobs in the ZCTA are manufacturing jobs (1,537 employees, or 17 percent). Thus, shutting down the Marine Terminal would cause a loss of manufacturing jobs in the ZCTA, and would significantly impact the economic health of the area. This would be a potentially significant impact (Class I). **MM SOC-1** would be implemented; however, the impact would remain significant after mitigation.

Under the No Project Alternative, there would likely be an increase in the POLA/POLB vessel calls because the Marine Terminal has been abandoned, thereby increasing the frequency of spills. The 1991 *Sammi Superstar* spill caused a port closure and serious disruption of port activities with resulting socioeconomic impacts (see Section 4.1, System Safety and Reliability). This would be a significant impact.

Mitigation Measures

SOC-1. Jobs Assistance Plan. The applicant shall prepare a jobs assistance plan that identifies methods to help displaced employees obtain approximately comparable jobs. The plan shall be consistent with the applicant's terms of employment policies. The jobs assistance plan shall be implemented for a period of a total of 4 months. Acceptable forms of assistance may include but are not limited to: provision of a job relocation center on-site prior to lease termination, contact with local employers to identify future staffing needs, comparable job placement within Chevron at another facility and relocation assistance, training for new skills, and retention of a job search firm to assist employees in obtaining new jobs.

Rationale for Mitigation

These mitigation measures focus on lessening the impact of lost jobs and socioeconomic impacts to the extent feasible. **MM SOC-1** addresses displaced workers and their need to find employment elsewhere.

Residual Impacts

The effectiveness of implementing Mitigation Measure SOC-1 is highly dependent upon external factors, such as local and global economic conditions, job demand at other similar facilities, and industry-specific fluctuations in the marketplace, which are outside the control of the applicant. Therefore, the effective relocation of all employees cannot be assured. Due to the large number of employees that would be displaced and jobs that would be lost, Impact SOC-1 would remain significant.

Impact SOC-2: Decreased Fuel Supply and Increased Fuel Supply Demand

The No Project Alternative could decrease fuel supply leading to increased demand for delivery and utilization of basic public services that cannot be met by the government.

The closure of the Marine Terminal and throughput reduction at the Refinery would reduce Southern California fuel supply (Potentially Significant, Class I).

Impact Discussion

The shutdown of the Marine Terminal would cause a loss of refining capacity in the Los Angeles area consistent with the volumes of crude that could not be transported into the Refinery through other means. This would cause a potentially substantial reduction in the refining capacity in the region. In order to keep pace with demand, additional import of refined products to other refineries and expansion of other refineries' throughput would be expected. Short-term shortages and potential long-term reductions in the availability of fossil fuels to consumers in the southern California region are anticipated.

As previously discussed under the existing setting, a variety of factors contribute to fuel supply, including economic, environmental, and market-related factors. Therefore, the relative stability of future fuel supplies and their price cannot be conclusively known. However, the closure of the Marine Terminal would further constrain supply and thereby cause economic effects. The magnitude of these effects cannot be effectively predicted, due to the many outside factors that also influence fuel supply and fuel pricing. Refineries, pipelines, and distribution terminals operate in a near-continuous

pattern designed to maintain an adequate supply of gasoline at service stations and diesel fuel at truck stops. When there is a problem at a Refinery and a process unit has to be shut down, production is disrupted. Thus, the reduction in Refinery capacity would, in turn, further constrain the fuel supply, exacerbating price volatility. The expected increase in fuel prices for Southern California residents and businesses, thus increasing the cost of living without increasing wages. Therefore, this would be a significant and unavoidable impact (Class I).

Mitigation Measures

None feasible.

Rationale for Mitigation

Alleviation of constraints to the fuel supply caused by the Marine Terminal closure could be mitigated through either (1) increased transportation of crude oil into the Refinery by other means or (2) increased production at other refineries statewide. The ability to increase throughput of crude oil into the Refinery is unknown and is considered speculative for detailed consideration. Success of such development would depend on many factors, including land availability, land costs, and regulatory agency approval, which are currently unknown. The ability of other refineries to increase production is outside the control of the applicant and the lead agency. Therefore, the feasibility of implementation of this type of mitigation measure is unknown.

Residual Impacts

Impacts associated with SOC-2 would remain significant.

Table 5-7
Summary of Significant Socioeconomic Impacts and Mitigation Measures
No Project Alternative

Impact	Mitigation Measures
SOC-1: Displacement or Termination of Economic Activity	**SOC-1.** Jobs Assistance Plan
SOC-2: Decreased Fuel Supply and Increased Demand for Public Services	None feasible.

CBM Relocation in State Waters for Crude Only

Relocating the conventional buoy mooring (CBM) in state waters for crude only would require 30 construction workers during the construction phase. These workers would

be drawn from the existing construction industry of southern Los Angeles County. This would be a beneficial impact to the local economy.

The operational phase of this alternative would be the same as those discussed under the proposed Project. The Marine Terminal would continue to handle the same amount of crude oil. There would be no change in the number of employees; therefore, as under the proposed Project, there would be no impacts. There would be no change to refining capacity as a result of this alternative.

SPM Replacement in State Waters for Crude Only

Under this alternative, replacing the single point moring (SPM) in state waters for crude only, there would be no impacts, similar to the CBM alternative.

VLCC Use of Pier 400

Under this alternative, the Marine Terminal would continue to operate, but a portion of the Marine Terminal operation would utilize the recently permitted Pier 400 facility. Due to safety concerns associated with the pipeline transporting products through populated areas and the modification and heating requirements of transporting heavy crude oil through pipelines from the POLA/POLB, the only Marine Terminal traffic displaced under this alternative would be the VLCC traffic that currently transports light crude oil to the Refinery by lightering offshore and using smaller tankers to call on the Marine Terminal. Under this alternative, all exports of refined product and imports of heavier crude oil would continue using the existing Marine Terminal. This alternative would require some construction and pipeline modifications that would create temporary employment for construction workers. The increased use of the port by vessels and the associated increase in spill risk could cause an increase in port closures, as discussed above under the no project alternative Impact **SOC-1**.

5.1.6 Cumulative Projects Analysis

The proposed Project would not cause any adverse socioeconomic impacts. Therefore, it would not contribute to any cumulative social and economic impacts that may be caused by other projects in the Santa Monica Bay area.

5.2 ENVIRONMENTAL JUSTICE

5.2.1 Background

On February 11, 1994, President Clinton issued the Executive Order on Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

(Executive Order 12898), which was designed to focus attention on environmental and human health conditions in high minority populations and low-income communities and promote non-discrimination in programs and projects substantially affecting human health and the environment (White House 1994). The order requires the U.S. Environmental Protection Agency (EPA) and all other Federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and or low-income populations.

In 1997, the EPA's Office of Environmental Justice released the Environmental Justice Implementation Plan, supplementing the EPA environmental justice strategy and providing a framework for developing specific plans and guidance for implementing Executive Order 12898. Federal agencies received a framework for the assessment of environmental justice in the EPA's Guidance for Incorporating Environmental Justice Concerns in EPA's National Environmental Policy Act (NEPA) Compliance Analysis in 1998. This approach emphasized the importance of selecting an analytical process appropriate to the unique circumstances of the potentially affected community.

While many state agencies have utilized the EPA's Environmental Justice Implementation Plan as a basis for the development of their own environmental justice strategies and policies, the majority of California State agencies do not yet have guidance for incorporating environmental justice impact assessment into the California Environmental Quality Act (CEQA) analysis. The California Air Resources Board (CARB), for example, has examined this issue and received advice from legal counsel in a memorandum entitled "CEQA and Environmental Justice." This memorandum states, in part, "For the reasons set forth below, we will conclude that CEQA can readily be adapted to the task of analyzing cumulative impacts/environmental justice whenever a public agency (including the Air Resources Board, the air pollution control districts, and general purpose land use agencies) undertakes or permits a project or activity that may have a significant adverse impact on the physical environment. All public agencies in California are currently obliged to comply with the CEQA, and no further legislation would be needed to include an environmental justice analysis in the CEQA documents prepared for the discretionary actions public agencies undertake."

Under Assembly Bill (AB) 1553, signed into law in October 2001, the Governor's Office of Planning and Research (OPR) is required to adopt guidelines for addressing environmental justice issues in local agencies' general plans. Currently, the OPR is in the

process of updating the General Plan Guidelines to incorporate the requirements of AB 1553.

5.2.2 California State Lands Commission Policy

The California State Lands Commission (CSLC) has developed and adopted an Environmental Justice Policy to ensure equity and fairness in its own processes and procedures. The CSLC adopted an amended Environmental Justice Policy on October 1, 2002, to ensure "Environmental Justice is an essential consideration in the Commission's processes, decisions and programs and that all people who live in California have a meaningful way to participate in these activities." The policy stresses equitable treatment of all members of the public and commits to consider environmental justice in its processes, decision making, and regulatory affairs, and the policy is implemented, in part, through identification of, and communication with, relevant populations that could be adversely and disproportionately impacted by CSLC projects or programs, and by ensuring that a range of reasonable alternatives is identified that would minimize or eliminate environmental impacts affecting such populations. This discussion is provided in this document consistent with and in furtherance of the Commission's Environmental Justice Policy. The staff of the CSLC is required to report back to the Commission on how environmental justice is integrated into its programs, processes, and activities (CSLC 2002).

5.2.3 Approach

This section analyzes the distributional patterns of high-minority and low-income populations on a regional basis and characterizes the distribution of such populations in the vicinity of the Marine Terminal and within the region. This analysis focuses on whether the proposed 30-year lease for the Marine Terminal and all Project Alternatives have the potential to disproportionately affect high-minority population(s) or low-income communities and thus create an adverse environmental justice impact. For the purposes of this analysis and as applied to tables and figures within this section, minority, minority population, low-income, low-income population, and disproportionately high and adverse effects are defined as follows:[1]

Minority means a person who is: (1) Black (having origins in any of the black racial groups of Africa); (2) Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race); (3) Asian American

[1] These definitions are provided by the Federal Highway Administration according to guidelines set by the Council of Environmental Quality and Executive Order 12898.

(having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or (4) American Indian and Alaskan Native (having origins in any of the original people of North America and who maintain cultural identification through tribal affiliation or community recognition).

Minority Population means any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who will be similarly affected by a proposed program, policy, or activity.

Low-Income means a household income at or below the United States Department of Health and Human Services poverty guidelines.

Low-Income Population means any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (such as migrant workers or Native Americans) who would be similarly affected by a proposed program, policy, or activity.

Disproportionately High and Adverse Effect on Minority and Low-Income Populations means an adverse effect that (1) is predominately borne by a minority population and/or a low-income population or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population.

5.2.4 Setting

The city of El Segundo incorporated in 1917 and was born as a result of the need for a second Refinery by Standard Oil to expand its operation in California. The city remained a one-industry town until the 1920s, when Mine's Field was chosen as the site for the new Los Angeles Municipal Airport. Then, in the mid-1950s, Southern California Edison purchased a 43-acre site for a major electrical generating station.

The addition of the Los Angeles International Airport (LAX), which officially opened in 1930, played a major role in turning El Segundo into an aerospace center. Douglas Aircraft, Hughes Aircraft, Northrop, and North American Aviation (Rockwell) were all located in El Segundo during the 1940s and 1950s. Most of these aircraft-related companies eventually transitioned into the aerospace and defense industry. In 1960, the creation of The Aerospace Corporation and Los Angeles Air Force Base gave El Segundo the esteemed title of "The Aerospace Capital of the World."

Today, the city encompasses over five square miles, spanning from LAX on the north, to the Chevron Refinery on the south, to the Pacific Ocean on the west, and Aviation Boulevard on the east. The city's population has leveled off at approximately 16,500 residents, which has enabled the community to preserve the small town feel within the surrounding metropolitan area of Los Angeles.

According to the SCAG, the city of El Segundo was forecasted to have a year 2000 population of 16,419 persons, 7,298 housing units, and employment for 66,490 persons. SCAG forecasted that 2005 the city of El Segundo would have a total population of 16,699 persons (an increase of 1.7 percent), 7,374 housing units (an increase of 1.0 percent), and provide employment for 74,289 persons (an increase of 10.5 percent). For the period of 2005 to 2010, SCAG forecasted continued, although slight, growth in the city of El Segundo; the citywide population is expected to reach 16,939 persons (an increase of 1.4 percent), housing will reach 7,489 housing units (an increase of 1.5 percent), and employment will total 80,405 jobs (an increase of 7.6 percent). For the period of 2010 to 2015, forecasted growth in the city of El Segundo continues; the citywide population is expected to reach 17,293 persons (an increase of 2.0 percent), housing will reach 7,605 units (an increase of 1.5 percent), and employment will total 87,024 jobs (an increase of 7.6 percent).

The study area for analyzing the effect of the proposed action on Environmental Justice populations is ZCTA 90245 (see Figure 5-2). In general, ZCTA more accurately represent area populations than census blocks. More specifically, ZCTA follow census block boundaries and the ZCTA code for each census block represents the majority zip code of the addresses within the census block. In addition, ZCTA exclude unique, single delivery point Zone Improvement Plan (ZIP) Codes, such as those for firms and organizations. Lastly, ZCTA are distinct from other Census Bureau statistical areas, such as census tracts, because they are not stable over time and are computer-delineated based on the location of addresses at the time of Census 2000 rather than manually delineated by local program participants or Census Bureau staff before the census.

Of note, the population within this area is less than two percent of the total population of the County, and the population within the regional study area is less than five percent of the County population. For assessing the regional effects on Environmental Justice populations, the regional study area includes the ZCTA of coastal communities within Los Angeles County. This section discusses the percentage and distribution of population that are defined as minority and low-income populations within the local and

regional study areas. Data used in this section are compiled from the 2000 Census; this is the most recent comprehensive population study of the affected areas.

Table 5-8 details key statistics regarding minority status of populations in the local and regional study area. Within ZCTA 90245, 16.04 percent of the population is defined as minority (83.96 percent of the population is considered white), which is approximately one-third of the comparable percentage (51.2 percent) for the County as a whole. Of the coastal areas situated within the County, none have minority populations at a proportion greater than for the County as a whole.

Table 5-9 details key statistics regarding income in the local and regional study area. At $61,341, the median household income in ZCTA 90245 was 45 percent greater than that for the County in 1999. The per capita income in 1999 dollars was 64 percent greater than that for the County. The percent of population with income below the poverty level was only 4.6 percent in the study area, compared to 17.9 percent for the County as a whole. Of the coastal areas situated within the County, only three of 18 ZCTA (90401 in Santa Monica, 90731 in San Pedro, and 90802 in Long Beach) have lower income and higher poverty levels than that of the County, and all three are substantial distances (more than ten miles [16.1 km]) from the Marine Terminal site.

Table 5-8
Race Population Distribution
2000

ZCTA	Total Population	White (%)	Black or African American (%)	American Indian and Alaska Native (%)	Asian (%)	Native Hawaiian and Other Pacific Islander (%)	Some other race (%)	Two or more races (%)	Hispanic or Latino (of any race) (%)
ZCTA 90245 (El Segundo)	16,033	83.96	1.2	0.5	6.4	0.3	3.5	4.5	11.0
Other Coastal Communities in La County									
Malibu 90265	19,614	89.4	1.8	.3	3.3	0.1	2.2	2.9	6.5
Santa Monica 90401	5,201	78.6	4.2	0.6	6.7	0.1	5.9	3.9	12.3
90402	11,492	89.7	0.5	0.2	5.9	0.1	1.1	2.5	3.7
90403	23,556	86.4	1.5	0.2	6.8	0.1	1.7	3.2	5.7
90405	26,089	78.5	3.2	0.5	7.6	0.1	5.4	4.7	13.2
Los Angeles (City)									
90291 – Venice	31,018	71.5	6.7	1.0	3.7	0.2	11.9	5.1	25.3
90292 – Marina del Rey	18,057	83.3	4.3	0.3	7.4	0.2	1.6	3.0	6.0
90293 – Playa del Rey	11,252	79.5	5.3	0.4	7.7	0.2	2.4	4.5	8.8
90731 – San Pedro	58,622	58.7	7.6	1.2	4.1	0.5	21.2	6.8	48.0
90732 – San Pedro	21,264	77.5	3.8	0.6	6.7	0.2	6.6	4.5	21.0

ZCTA	Total Population	White (%)	Black or African American (%)	American Indian and Alaska Native (%)	Asian (%)	Native Hawaiian and Other Pacific Islander (%)	Some other race (%)	Two or more races (%)	Hispanic or Latino (of any race) (%)
90272 – Pacific Palisades	22,538	91.4	0.8	0.1	4.5	0.1	1.0	2.2	3.6
Manhattan Beach 90266	33,742	89.0	0.6	0.2	6.0	0.1	1.2	2.8	5.2
Hermosa Beach 90254	18,682	89.6	0.8	0.4	4.4	0.2	1.7	2.9	6.8
Redondo Beach and Coastal Torrance 90277	34,174	83.8	1.8	0.4	7.4	0.2	2.6	3.8	9.2
Palos Verdes Estates 90274	24,976	76.8	1.2	0.2	18.0	0.1	0.9	2.9	3.8
Rancho Palos Verdes 90275	41,261	67.2	2.0	0.2	25.9	0.1	1.2	3.4	5.7
Long Beach 90802	38,419	46.9	17.4	1.3	5.3	0.6	22.5	6.0	39.3
90803	31,349	86.0	2.2	0.5	4.5	0.2	3.3	3.3	9.9
Los Angeles County	9,519,338	48.7	9.8	0.8	11.9	0.3	23.5	4.9	44.6
State of California	33,871,648	59.5	6.7	1.0	10.9	0.3	16.8	4.7	32.4

1 Source: US Census Bureau 2000 (SF 1)

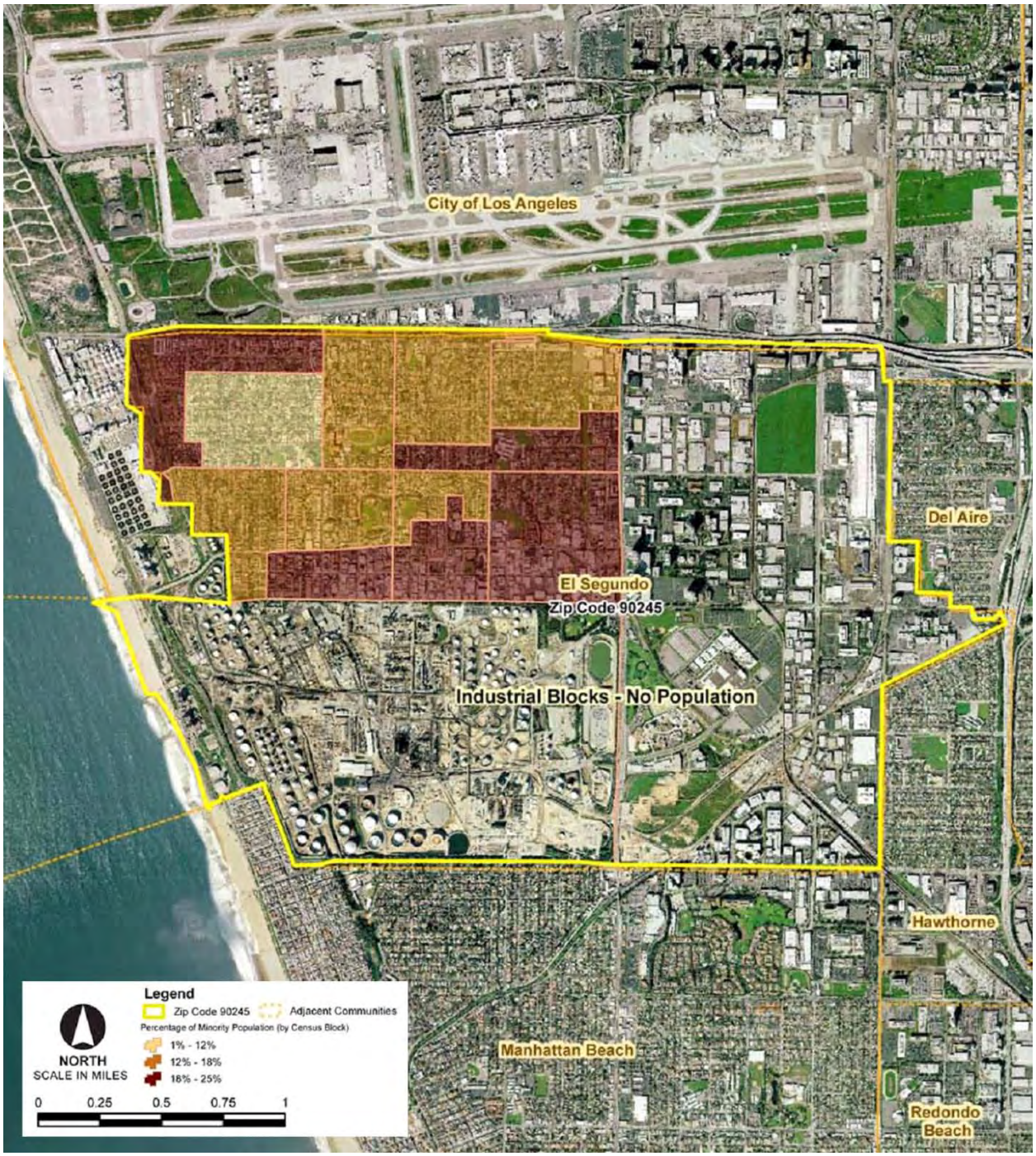
Table 5-9
Income and Poverty
1999

ZCTA	Median Household Income[a]	Per Capita Income[a]	Percent of Population with Income below Poverty Level for All Ages
El Segundo 90245	$61,341	$33,996	4.6%
Coastal Communities in Los Angeles County			
Malibu 90265	100,857	62,351	6.8
Santa Monica			
90401	36,461	33,049	19.6
90402	118,553	91,147	3.6
90405	50,540	40,395	9
Los Angeles (City)			
90291—Venice	45,769	34,455	13.2
90292—Marina del Rey	72,215	67,210	7.8
90293—Playa del Rey	66,425	50,615	6.5
90731—San Pedro	35,910	18,043	20.5
90732—San Pedro	63,614	30,842	5.9
90272—Pacific Palisades	122,877	81,609	3.8
Manhattan Beach 90266	100,761	61,184	3.3
Hermosa Beach 90254	81,352	54,201	4.5
Redondo Beach 90277	68,263	43,623	5.8
Torrance 90503	58,127	28,844	5.9
Palos Verdes Estates 90274	117,979	65,641	2.0
Rancho Palos Verdes 90275	95,643	46,294	2.9
Long Beach			
90802	25,860	17,668	27.8
90803	60,513	48,056	5.3
Los Angeles County	**$42,189**	**$20,683**	**17.9%**
State of California	**$47,493**	**$22,711**	**14.2%**

Note: a. All dollar amounts are in 1999 dollars.
Source: US Census Bureau 2000 (SF 3)

Figure 5-2 demonstrates the minority population percentage in ZIP Code 90245.

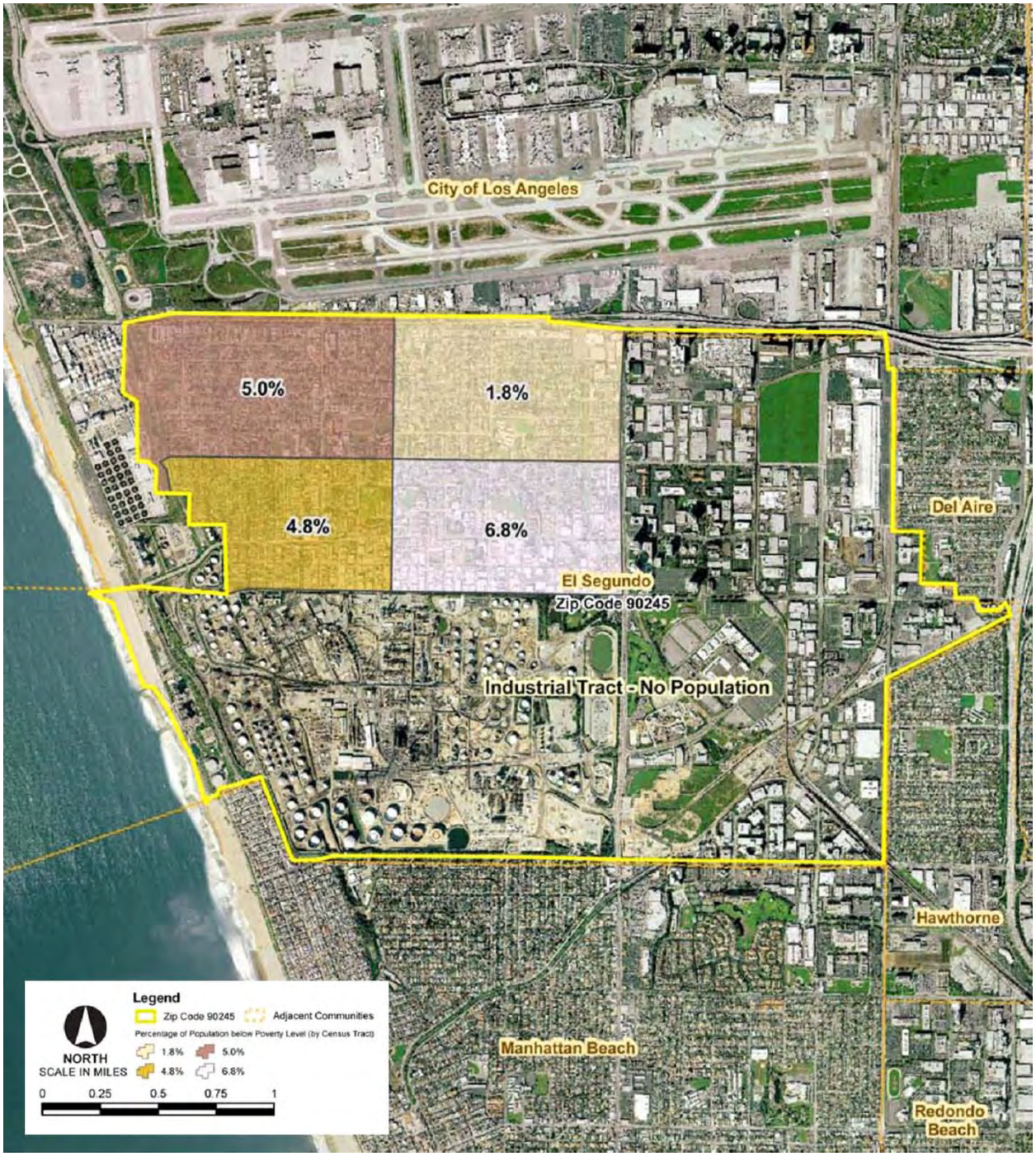
Figure 5-2
ZIP Code 90245 Minority Population



Source: US Census Bureau 2000 (SF 3)

Figure 5-3 demonstrates the percentage of the population below poverty levels within ZIP Code 90245.

Figure 5-3
ZIP Code 90245 Poverty Levels



Source: US Census Bureau 2000 (SF 3)

5.2.5 Policy Issues

A conflict with the CSLC's Environmental Justice Policy would occur if the proposed Project would:

- Have the potential to disproportionately affect minority and low-income populations at levels exceeding the corresponding medians for the County in which the Project is located; or

- Result in a substantial, disproportionate decrease in the employment and economic base of minority and low-income populations residing in the County and immediately surrounding cities.

5.2.6 Policy Analysis And Conditions

As shown in Table 5-8, Race Population Distribution, the estimated minority population in the vicinity of the Project site is 16.04 percent, which is approximately one-third of the minority population percentage (68.9 percent) for the County as a whole. Of the coastal areas within the County, none have a greater proportion of minority populations than the County as a whole. Therefore, continuing operations at the Marine Terminal will not disproportionately affect minority populations within the vicinity of the site. Within the regional study area, none of the ZCTA has a greater proportion of minority populations than the County as a whole. Therefore, continuing operations at the Marine Terminal would not disproportionately adversely affect minority populations within the regional study area, in fact continued operations would not cause any effects.

As shown in Table 5-9, Income and Poverty, the estimated population with income below the poverty level within the vicinity of the Project site is 4.6 percent, which is approximately one-quarter of the percentage of population with income below the poverty level in the County (17.9 percent). Three ZCTA of 18 within the regional study area have a greater proportion of individuals with income below the poverty level than for the County as a whole (Santa Monica, San Pedro, and Long Beach, see Table 5-9). Santa Monica ZCTA 90401 is approximately 10 miles away from the Project site, on Santa Monica Bay; San Pedro ZCTA 90731 and Long Beach ZCTA 90802 are more than 20 miles from El Segundo, on San Pedro Bay. Ongoing activities at the Marine Terminal would not be expected to disproportionately affect these populations. Continuation of the existing operations at the Marine Terminal would not disproportionately adversely affect low-income populations within the site vicinity or regional study area. No effects would occur.

5.2.7 Relationship To Alternatives

No Project Alternative

If the Marine Terminal lease were terminated immediately, it is assumed that the Marine Terminal would be closed, the equipment would be removed, and the terminal site would be cleaned for alternative uses. As detailed in Section 5.1, Socioeconomic Effects, the shutdown of the Marine Terminal would cause a loss of jobs, which could contribute to an increase in unemployment and directly affect low-income populations. Mitigation measures such as finding jobs for Refinery workers at other companies or attracting another industry to occupy the site would reduce the effect but not eliminate it. In addition, shutdown of the Marine Terminal could increase fuel prices for Southern California residents and businesses, thus increasing the cost of living without increasing wages. However, given the high median income and low poverty level in the adjacent El Segundo community, it is not anticipated that the No Project Alternative would disproportionately affect low-income populations.

If the Marine Terminal lease was terminated, use of area pipelines to transport crude oil, particularly between the El Segundo Refinery and the ports, could increase. This could increase impacts on minority and low income areas, which would be considered a significant impact.

Impact EJ-1: Increased Use of Pipelines Could Adversely Affect Populations

The No Project Alternative could increase the use of area pipelines for the transportation of crude oil, leading to environmental justice impacts (Potentially Significant, Class I).

Impact Discussion

The shutdown of the Marine Terminal would increase use of area pipelines for the transportation of crude oil to the Refinery and the transportation of refined products currently being shipping into and out of the Refinery via the Marine Terminal. This could increase impacts on area minorities and low income populations, particularly those in the vicinity of the ports. This would be considered a significant impact.

Mitigation Measures

None feasible.

Rationale for Mitigation

There are limited means by which crude oil or products could be transported to/from the Refinery in quantifies needed to keep the Refinery operating. Pipelines would produce the lowest spill risk, but some increase in spill risk would occur along pipeline routes.

Residual Impacts

Impacts associated with **EJ-1** would remain significant.

CBM Relocation in State Waters for Crude Only

The construction phase of this alternative would require skilled construction workers. These workers would be drawn from the existing construction industry of southern Los Angeles County. This would be a temporary beneficial effect to the local economy and all members of the community, including minority and low-income populations.

The operational phase of this alternative would have the same effects as those discussed under the proposed Project. The Marine Terminal would continue to handle the same amount of crude oil as previously discussed. There would be no change in the number of employees and, hence, effects would be the same as the proposed Project.

SPM Replacement in State Waters for Crude Only

Under this alternative, the construction and operation issues would be the same as those discussed under the Conventional Buoy Mooring Relocation Alternative.

VLCC Use of Pier 400

The construction phase of this alternative, related to modifying pipelines, would require skilled construction workers. These workers would be drawn from the existing construction industry in southern Los Angeles County. This would be a temporary beneficial effect to the local economy and all members of the community, including minority and low-income populations.

The operational phase of this alternative would have the same effects as those discussed under the proposed Project, except that some jobs would be shifted to the Pier 400 facility to handle the offloading at the location. There would be no net change in the number of employees between the port and the Marine Terminal, and, hence, effects would be the same as the proposed Project.

The use of the Pier 400 for VLCC class tankers and the associated transportation of the crude oil from the port to the El Segundo Refinery would increase the use of pipelines. This could cause an increase in impacts similar to **EJ-1**.

5.2.8 Cumulative Projects Policy Analysis

The proposed Project would not have any significant adverse effects on environmental justice. Therefore, the Project would not contribute to any cumulative adverse environmental justice effects on populations that may be caused by other projects in the Santa Monica Bay area. In fact, water quality improvements to Santa Monica Bay described in Section 4.2, Water Quality, would be anticipated to provide enhanced opportunity for public use of the coastline by all members of the community, including minority and low-income populations.